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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,670	07/24/2001	Bruce A. Willins	6000.001500/1122	3824

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EXAMINER	
NGUYEN, TOAN D	
ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/911,670	WILLINS ET AL.	
	Examiner	Art Unit	
	Toan D. Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 15-20* is/are rejected.

7)☒ Claim(s) *14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/18/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: page 7 lines 1 and 2, "processor 54 and radio 52" should be changed --- processor 52 and radio 54 ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-7 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al. (US 6,326,926) in view of Vij et al. (US 6,452,910).

For claims 1-2, 4, 6-7 and 18-19, Shoobridge et al. disclose in a system for providing wireless data communication using a first protocol (figure 3, reference IEEE 802.11 standard, col. 7 lines 1-3), said system having access point (figure 1, reference 24, col. 5 line 7) for conducting wireless data communications with mobile units (figure 1, reference 36, col. 5 line 34) using said first protocol (figure 3, reference IEEE 802.11 standard, col. 7 lines 1-3), a method for conducting communications with said access point (figure 2, reference 54, col. 6 line 5) comprising providing said access point (figure 2, reference 54) with a radio module operating according to a second wireless data communications protocol (figure 2, reference Bluetooth standard, col. 5 lines 64-65), and receiving said communications at said access point (figure 3, reference 54b) using said second wireless data communications protocol to allow management of the access point (figure 3, reference Bluetooth standard, col. 6 lines 65-66).

However, Shoobridge et al. do not expressly disclose conducting out of band management communications with said access point. In an analogous art, Vij et al. disclose conducting out of band management communications with said access point (col. 7 lines 14-17, and col. 7 lines 43-45). Vij et al. disclose further at least one of configuring one or more resources of said access point and adjusting one or more parameters of said access point responsive to said received management communications (col. 7 lines 43-52 and col. 7 lines 43-45 as set forth in claim 2); authenticating said management communications (col. 11 lines 4-5 as set forth in claims 4 and 7); associating said radio module as a slave unit (col. 8 line 6 as set forth in claim 6); at least one of updating system information of said access point, modifying system

programming of said access point, and modifying communications parameters of said access point responsive to said received management communications (col. 7 lines 14-22, col. 7 lines 43-49 and col. 8 lines 48-50 as set forth in claim 18); and monitoring the data communications using said second wireless data communications protocol (col. 8 lines 22-50 as set forth in claim 19).

One skilled in the art would have recognized conducting out of band management communications with said access point, and would have applied Vij et al.'s wireless bridge in Shoobridge et al.'s cellular communication system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Vij et al.'s bridging apparatus for interconnecting a wireless PAN and a wireless LAN in Shoobridge et al.'s method of operating a wireless and a short-range wireless connection in the same frequency with the motivation being to provide a single working device implementations of these technologies so they do not interfere or disrupt the operation of each other (Abstract lines 9-11).

For claim 3, Shoobridge et al. disclose wherein said first protocol is 802.11 Protocol (col. 7 lines 1-3) and said second wireless communications protocol is Bluetooth (col. 6 lines 65-66).

For claim 5, Shoobridge et al. disclose wherein said second wireless communications protocol is Bluetooth (col. 6 lines 65-66).

5. Claims 8-13, 15-17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vij et al. (US 6,452,910) in view of Young et al. (US 6,965,942).

For claim 8, Vij et al. disclose bridging apparatus for interconnecting a wireless PAN and a wireless LAN, comprising:

a first radio module (figure 1, reference IEEE 802.11 card, col. 4 line 20) using a first protocol for transmitting wireless data messages received at said first interface and for receiving and relaying said data messages via said first interface (col. 4 lines 18-20);

at least one processor (figure 1, reference CPU) connected to said first interface and said radio module for controlling said access point (col. 4 lines 18-22); and

a second radio module (figure 1, reference Bluetooth card) operating using a second wireless communications protocol, different from said first protocol, for receiving wireless management (col. 4 line 20, and col. 7 lines 14-17).

However, Vij et al. do not expressly disclose a first interface for conducting data communications with one or more computers. In an analogous art, Young et al. disclose a first interface for conducting data communications with one or more computers (figure 1, reference A-1 114 to A-n 118) (col. 4 lines 63-65 and col. 5 lines 4-16).

One skilled in the art would have recognized the first interface for conducting data communications with one or more computers, and would have applied Young et al.'s wireless end station in Vij et al.'s wireless bridge. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Young et al.'s method and system for improving throughput over wireless local area network with a dynamic contention window in Vij et al.'s bridging apparatus for interconnecting a wireless PAN and a wireless LAN with the motivation being to define by the 802.11

standard of equipment, a wireless end station, which is usually a personal computer (PC) equipped with a wireless network interface card (NIC) (col. 5 lines 4-6).

For claim 9, Vij et al. disclose wherein said second radio module is arranged to operate as a slave module using a master slave protocol (col.8 line 6).

For claim 10, Vij et al. disclose wherein said second radio module is arranged to operate as a slave module using the Bluetooth protocol (col.8 line 6).

For claim 11, Vij et al. disclose wherein said processor is further arranged to authenticate communications via said second radio module (col. 11 lines 4-6).

For claim 12, Vij et al. disclose bridging apparatus for interconnecting a wireless PAN and a wireless LAN, comprising:

a processor (figure 1, reference CPU) communicatively, the processor adapted to:

allow data communications with one or more remote devices (wireless vehicle or PDA) over a first communications protocol (Wireless LAN or IEEE 802.11) (col. 6 lines 45-48); and

allow access to one or more management features of the apparatus over a second communications protocol (Bluetooth) responsive to received management communications, wherein the second communications protocol is a wireless protocol and is different from the first communications protocol (col. 6 lines 52-54).

However, Vij et al. do not expressly disclose an interface. In an analogous art, Young et al. disclose an interface (col. 5 lines 14-15).

One skilled in the art would have recognized the interface, and would have applied Young et al.'s wireless end station in Vij et al.'s wireless bridge. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Young et al.'s method and system for improving throughput over wireless local area network with a dynamic contention window in Vij et al.'s bridging apparatus for interconnecting a wireless PAN and a wireless LAN with the motivation being to provide an access point consists of an interface (col. 5 line 15).

For claim 13, Vij et al. disclose wherein the processor (figure 1, reference CPU) is adapted to allow the data communications through a first radio module and to allow to the management features through a second radio module (col. 6 lines 45-54).

For claim 15, Vij et al. disclose wherein the processor is further adapted to authenticate communications associated with the access of the management features (col. 11 lines 1-6).

For claim 16, Vij et al. disclose wherein the first protocol is 802.11 protocol and the second wireless communications protocol is Bluetooth protocol (col. 3 line 50).

For claim 17, Vij et al. disclose wherein the processor is further adapted to allow monitoring of the data communications over the second communications protocol (col. 8 lines 22-50).

For claim 20, Vij et al. disclose wherein the processor is further allows monitoring the data communications using said second wireless data communications protocol (col. 8 lines 22-50).

Allowable Subject Matter

6. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 4/21/06 have been fully considered but they are not persuasive.

The applicant argues with respect to claims 1, 8, and 12, that Vij fails to teach or suggest that the access point receives management communications over a connection using the second protocol. The passage cited by the Office Action at col. 7, lines 14-17 only mentions regular data communication traffic, not management communications. The examiner disagrees. Applicant's attention is directed to Vij's patent at col. 7 lines 14-17 (see figure 6), where Vij clearly teaches "The wireless bridge is responsible for reformatting the incoming data from the vehicle module (receives management communications means, see the specification, on page 5 lines 2-4) and sends them to the Internet-connected backend server on a TCP/IP network connection."

The applicant argues that Viji fails to suggest receiving management communications using a second, different wireless protocol. The examiner disagrees. Vij teaches at col. 6 lines 45-46 (see figure 6), "Transmission of data between the wireless bridge and the server is via the wireless LAN (first protocol means)". Then, Viji teaches further at col. 7 lines 4-5, "It (the Data Acquisition System (DAS) means) communicates with the wireless bridge through the Bluetooth wireless connection (a second, different wireless protocol means)."

The applicant argues further that the sending of the disconnect request from the server to the mobile device does not constitute receiving management communication via the second protocol at the access point. In response, the sending of the disconnect request from the server to the mobile device is irrelevant to the limitations of the claims 1, 8, and 12.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN

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